



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Ghosh et al.

Art Unit: 1617

Application No. 09/851,882

Examiner: G. Yu

Filed: May 9, 2001

For: **COSMETIC COMPOSITION WITH  
IMPROVED SKIN MOISTURIZING  
PROPERTIES**

**DECLARATION UNDER 37 C.F.R. § 1.132 OF USHA V. MURTHY**

Mail Stop Non-Fee Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, Usha V. Murthy, hereby declare the following:

1. I am currently a Section Manager at Alberto-Culver and have been employed with Alberto-Culver for the past eight years. I have over 18 years of experience in the area of personal care products, with extensive experience in research and development of skin care products, including cleansing and moisturizing products. I am currently responsible for skin product development relating to cleansers, moisturizers, and specialty treatments such as wrinkle creams and acne treatments.

2. I received a Bachelor's Degree in Biology and Chemistry from the University of Illinois at Chicago in 1974, and a Master's Degree in Microbiology from Illinois Institute of Technology in 1982.

3. I am one of the named inventors in the present application. The present invention pertains to cosmetic compositions, a method of enhancing moisture retention in the skin, a method of reducing the rate of escape of water from the skin, and a method of improving the after-feel of a cosmetic composition when applied to the skin.

4. Under my direction, experiments were conducted in accordance with Example 3 of the present application. The experiments involved preparing and evaluating the skin

moisturizing effect of three samples (Sample A and Comparative Samples B and C). Sample A contained a 6:1 ratio (wt./wt.) of urea to coenzyme Q10. Comparative Sample B contained coenzyme Q10 alone, and Comparative Sample C contained urea alone. Each sample was prepared as an aqueous dispersion in accordance with Example 3 of the present application.

5. Sample A was prepared by dissolving urea and coenzyme Q10 in an aqueous polysorbate 80 solution, diluting with water to form a dispersion of urea and coenzyme Q10, and adding 2-phenoxyethanol. Comparative Sample B was prepared according to the procedure for preparing Sample A, except that urea was not included. Comparative Sample C was prepared according to the procedure for preparing Sample A, except that coenzyme Q10 was not included. The resulting dispersions contained the following components:

Dispersion	Component				
	Urea (wt.%)	Coenzyme Q10 (wt.%)	Polysorbate 80 (wt.%)	2-phenoxyethanol (wt.%)	Water (wt.%)
Sample A (6:1)	0.3	0.05	0.25	0.6	q.s.
Comparative Sample B	--	0.05	0.25	0.6	q.s.
Comparative Sample C	0.3	--	0.25	0.6	q.s.

6. One control sample also was evaluated. The control sample was a "blank" solution of polysorbate 80 (0.25 wt.%) and 2-phenoxyethanol (0.6 wt.%) in water (q.s.).

7. The testing protocol used was as follows. Five panelists were chosen. The panelists were women between 18 and 49 years of age, and were directed not to use any moisturizers on the arms on the day of the study and throughout the duration of the study. The panelists' arms were washed with soap and dried 15 minutes prior to commencing the study. Five sites on each arm of each panelist were marked off as testing areas. Skin moisturization scores were measured using a Nova DPM 9003 meter. All measurements were done in triplicate and averaged. Baseline moisturization was measured at the appropriate sites on each arm prior to the application of samples. Each assigned sample was applied (1 ml, applied four times during the first hour) to the appropriate site(s) and triplicate measurements were taken at each site and recorded at 2, 3, and 4 hours. Percent moisturization was calculated based on the Nova DPM 9003 meter readings according to the following equation: Percentage Increase = [(Final Reading - Initial Reading)/Initial Reading]

x 100. The results of the cumulative skin moisturizing effect are graphically depicted in the attached graph ("No treatment" corresponds to the control sample).

8. The data demonstrate a significant increase in cumulative skin moisturization for Sample A. The increase in cumulative skin moisturization exhibited by Sample A is surprisingly greater than what would have been expected in view of the cumulative moisturization scores for coenzyme Q10 alone (Comparative Sample B) and urea alone (Comparative Sample C).

9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the application or any patent issued thereon.

3/23/04  
Date

Usha Murthy  
Usha V. Murthy

Comparison of Various Blends of Q10 and Urea  
versus the ingredients alone

